

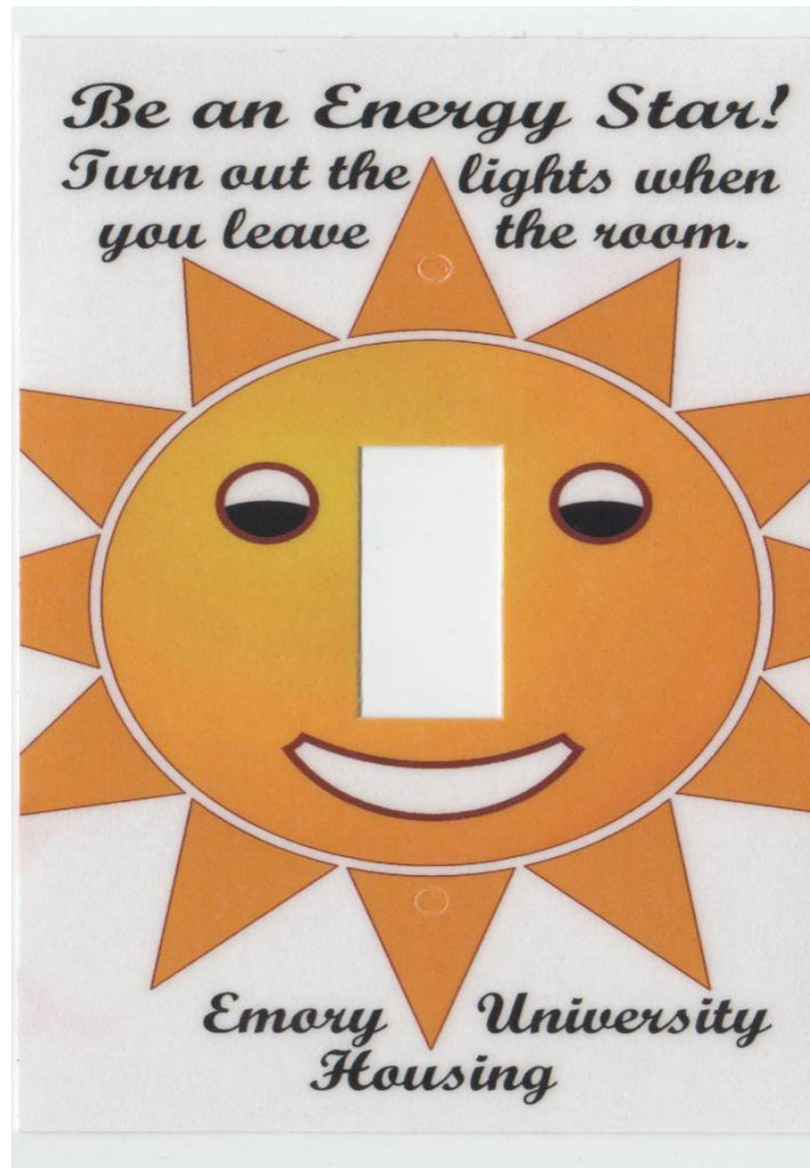


U.S. Department of Energy
Energy Efficiency and Renewable Energy

Turn out the lights when you leave the
room!



U.S. Department of Energy
Energy Efficiency and Renewable Energy





Staff Training







Replace 36 Exit Signs





Projects

Replace 36 Exit Signs

Cost

Exit Signs $36 \times \$60 = \2160

Labor $0.5 \text{ hours} \times \$18/\text{hour} \times 36 = \324

Total Cost = \$2484

First Year Electrical Savings = \$6000



LED





Additional Cost Savings

- $8760\text{hours} / \text{year} - 800\text{hours} = 10.95 \text{ changes} / \text{year}$
- $11 \times \$18 \times 0.5\text{hour} = \$99 / \text{year} / \text{bulb}$
- $\$99 \times 25 \text{ years} = \$2475 \text{ labor cost per bulb}$
- $\$2475 \times 36 \text{ exit lights} = \mathbf{\$89100}$



Light Controls

- Timers \$15 ea





Light Controls

- Motion Sensors

\$100 ea





Light Controls

- Photo Cells
& Light Sensors





Lamp Conversions

- Spring Lamps



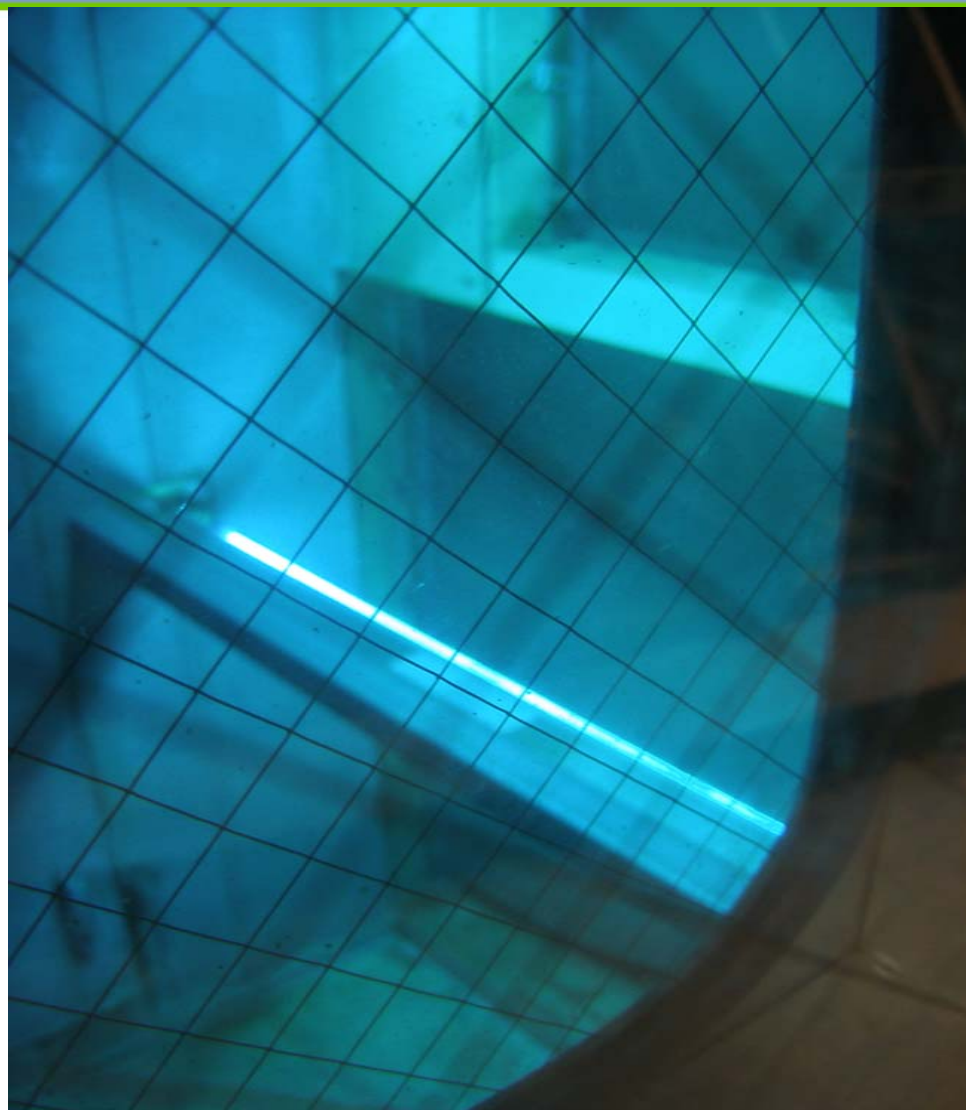
Light Fixture Replacement

- From T – 12 to T – 8 with quick start electronic ballast --minimum 40% savings
- Mini-fluorescent 13 watt = 60 watt incandescent
Labor saving 11 light changes



Ultraviolet Lights

- Use in HVAC
- Cleans coils
- Better air flow
- Kills biological contaminants





Ultraviolet Lights





HVAC Systems





Water Conservation





Building Renovation

- Building envelope
- New windows & doors
- New variable speed chiller
- New air handler
- New HVAC system controls
- New appliances - *
- Interior renovations
- New lighting
- New Fire alarm system



Doors & Windows





Chiller, Air Handler, & Cooling Tower





Appliances





Lighting





Total Annual Savings \$58,000

- Exit Signs \$6,000
- Water Conservation \$12,000
- Building Renovations \$40,000



U.S. Department of Energy
Energy Efficiency and Renewable Energy



U.S. Department of Energy
Energy Efficiency and Renewable Energy

